DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024074

Address: 333 Burma Road **Date Inspected:** 31-May-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1730 Prime Contractor: American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Jobsite

CWI Name: CWI Present: Yes No John Pagliero **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: SAS OBG**

Summary of Items Observed:

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

- 1. 9W PP79 W3 Lifting Lug Holes #1 &3 VT, MT and UT
- 2. 10E 11E E1 Diagonal Plate Splice (Inside)
- 3. 7W PP52 Drip Rails
- 4. 9W 10W W1 Drip Rails/Counterweight connections
- 1. 9W PP79 W3 Lifting Lug Holes #1 & 3 VT, MT and UT

The QA Inspector performed a Magnetic Particle Test (MT) on LLH's 1&3 at 9W PP79 W3. The QA Inspector tested 10% of the weld to verify the weld and testing by QC met the requirements of the contract documents. The QA Inspector noted that the work appeared to be free of defects and was found to be acceptable and in general conformance with the contract documents. Upon completion of the MT, the QA Inspector performed Ultrasonic Testing utilizing a G.E./Krautkramer USN 60. The QA Inspector also utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination. Upon completion of the testing, it was noted by the QA Inspector that no indications were present and the work was found to be acceptable.

2. 10E 11E E1 Diagonal Plate Splice (Inside)

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The QA Inspector randomly observed ABF welding operators Song Tao Huang and Jin Quan Huang performing Flux Core Arc Welding w/gas (FCAW-G) operations in the 3G vertical position on face E1 inside of the OBG. The QA Inspector observed the QC Inspector John Pagliero as being present in order to monitor the progress and ensure the welding parameters were within ABF-WPS-D15-3042B-1. The work progressed throughout the QA Inspector's shift. The QA Inspector noted that the work was in progress and appeared to be in general conformance with the contract documents.

3. 7W PP52 Drip Rails

The QA Inspector made periodic observations of ABF welder Jorge Lopez performing Shielded Metal Arc Welding (SMAW) in the 2G horizontal position on the Drip Rails located at 7W PP52. The QA Inspector observed the QC Inspector John Pagliero as being present in order to monitor the progress and ensure the welding parameters were within ABF-WPS-D15-F1200A. Upon completion of the work the QC Inspector performed a visual and Magnetic Particle Test on the weld. The QA Inspector verified the testing and found the work to be acceptable and in general conformance with the contract documents.

4. 9W 10W W1 Drip Rails/Counterweight connections

The QA Inspector randomly observed ABF welder Rick Clayborn performing SMAW in the 2G horizontal position on Drip Rails and Counterweight connections at 9W 10W W1. The QA Inspector observed the QC Inspector John Pagliero as being present to monitor the progress of the welding and ensure the welding parameters were within ABF-WPS-D15-F1200A for the Drip Rails and ABF-WPS-D15 1110A Rev 1 and for the Counterweight Connections. The work progressed throughout the QA Inspector's shift. The QA Inspector noted that the work was in progress and appeared to be in general conformance with the contract documents.

Summary of Conversations:

At the beginning the shift the QA Inspector met with QC Inspector John Pagliero and discussed the welders assignments and locations for the shift to include pending issues, ongoing work and required testing. ABF welder Darcel Jackson was to begin welding the retrofit of the 10mm plates on the underside of the "B" plate. The QA and the QC Inspector met with ABF welding Foreman Eric Sparks and the QC Inspector to request the WPS and pertaining details for the retrofit work being performed. The ABF Foreman stated that he would provide the requested documents.





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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer